



Orbit variations in MI8 line

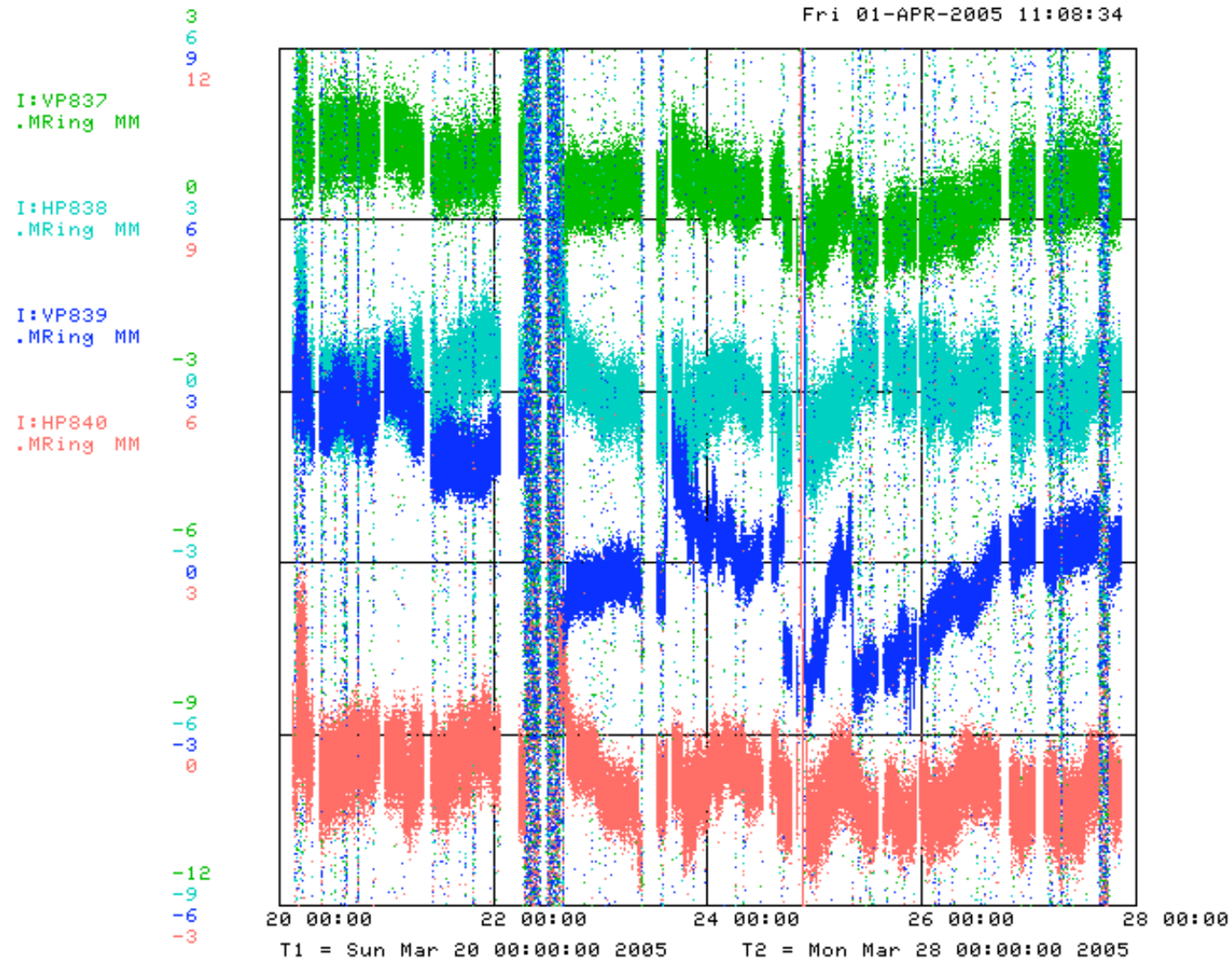
March 14, 2005

Ming-Jen Yang

Main Injector Dept.

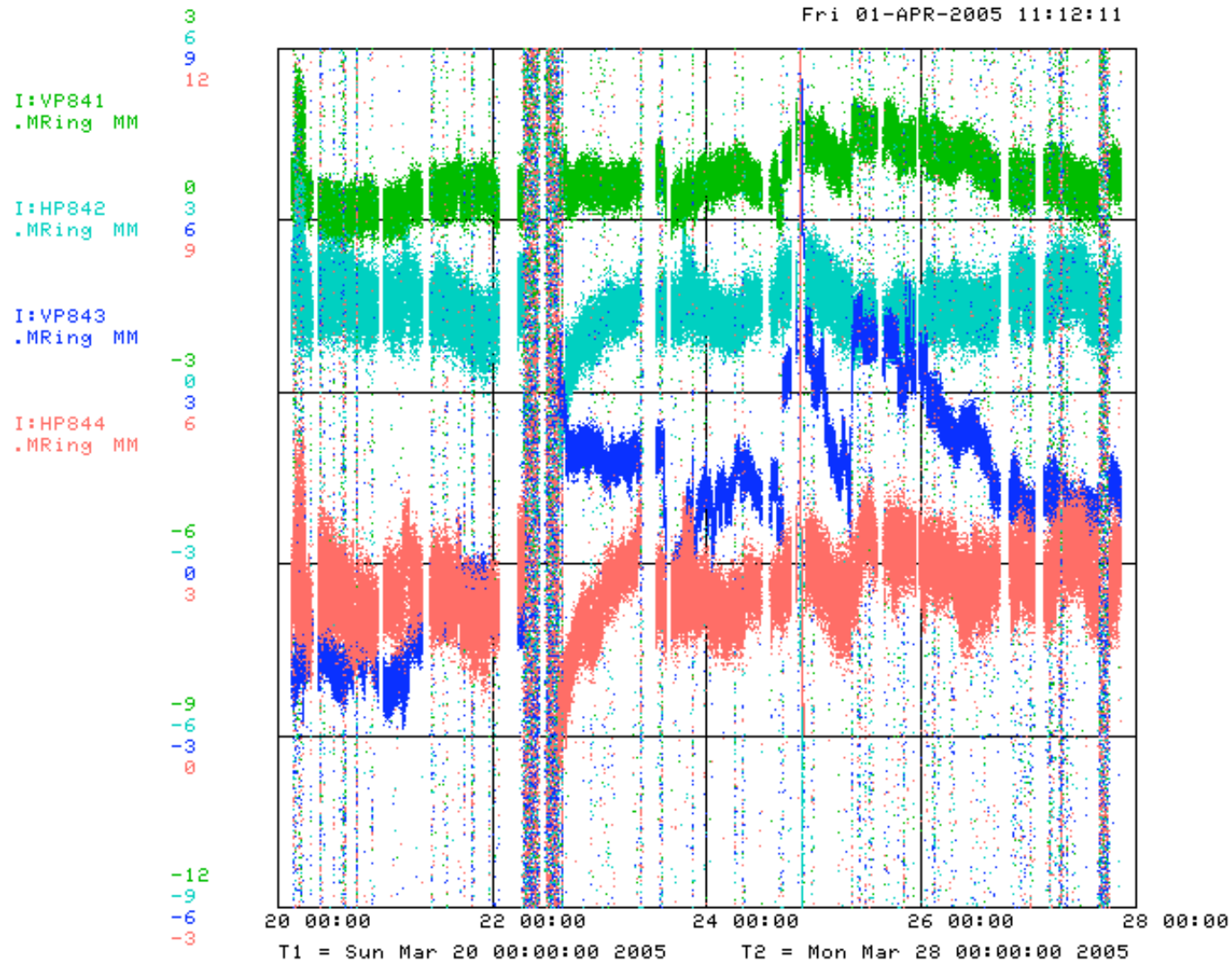


Positions at VP837, HP838, VP839, & HP840 from Lumberjack



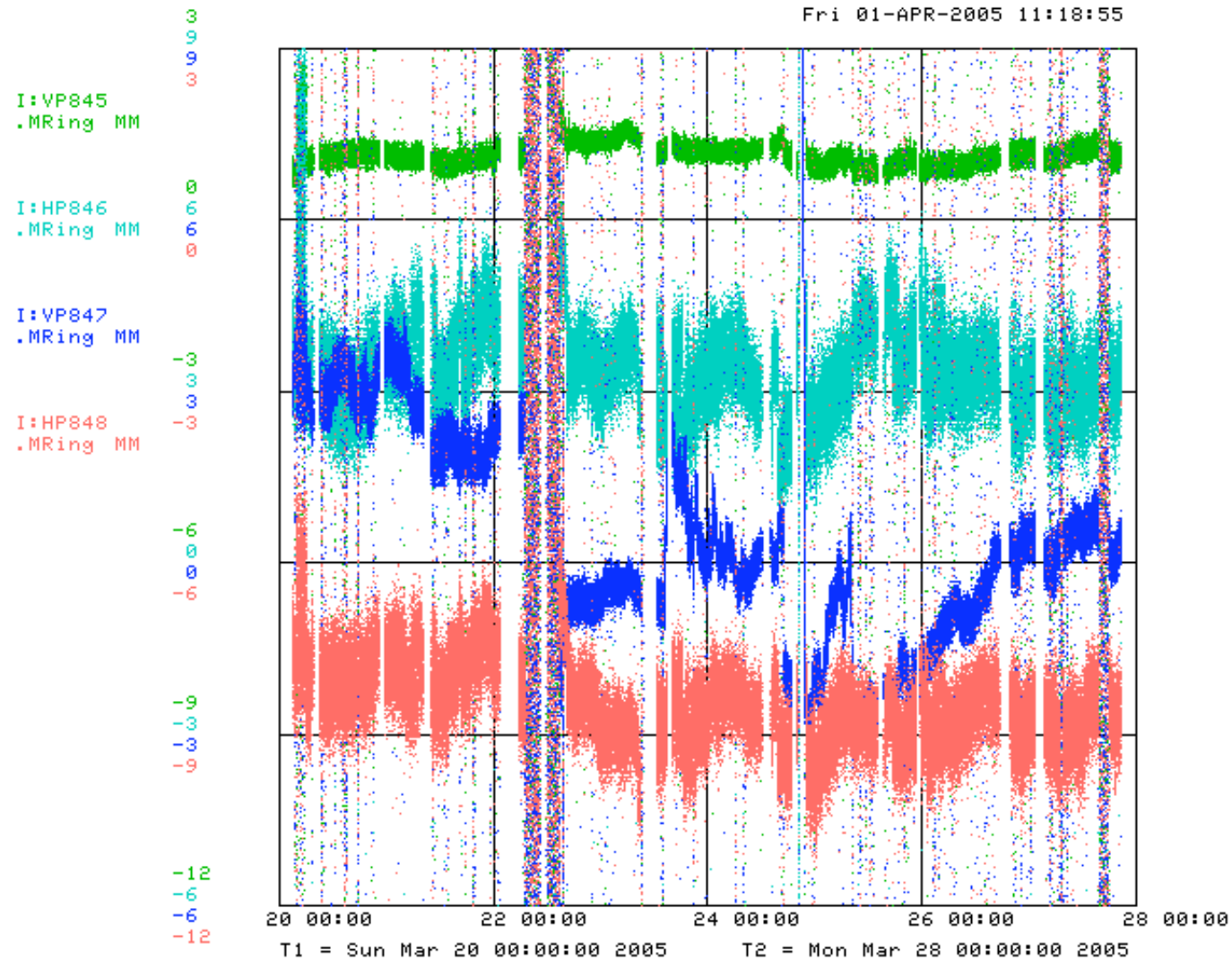
March 31, 2005

Positions at VP841, HP842, VP843 & HP844 from Lumberjack



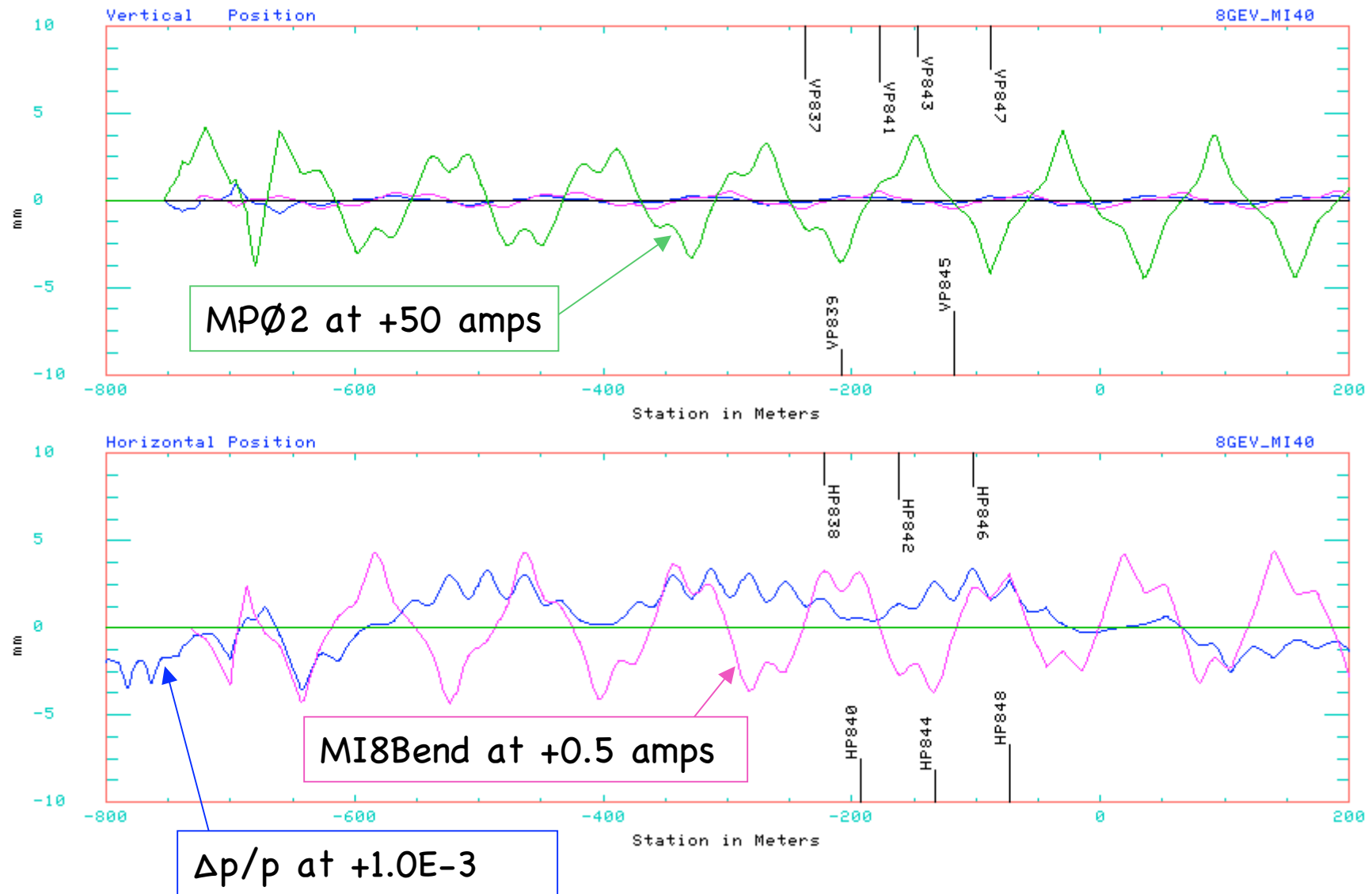
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Positions at VP845, HP846, VP847, & HP848 from Lumberjack



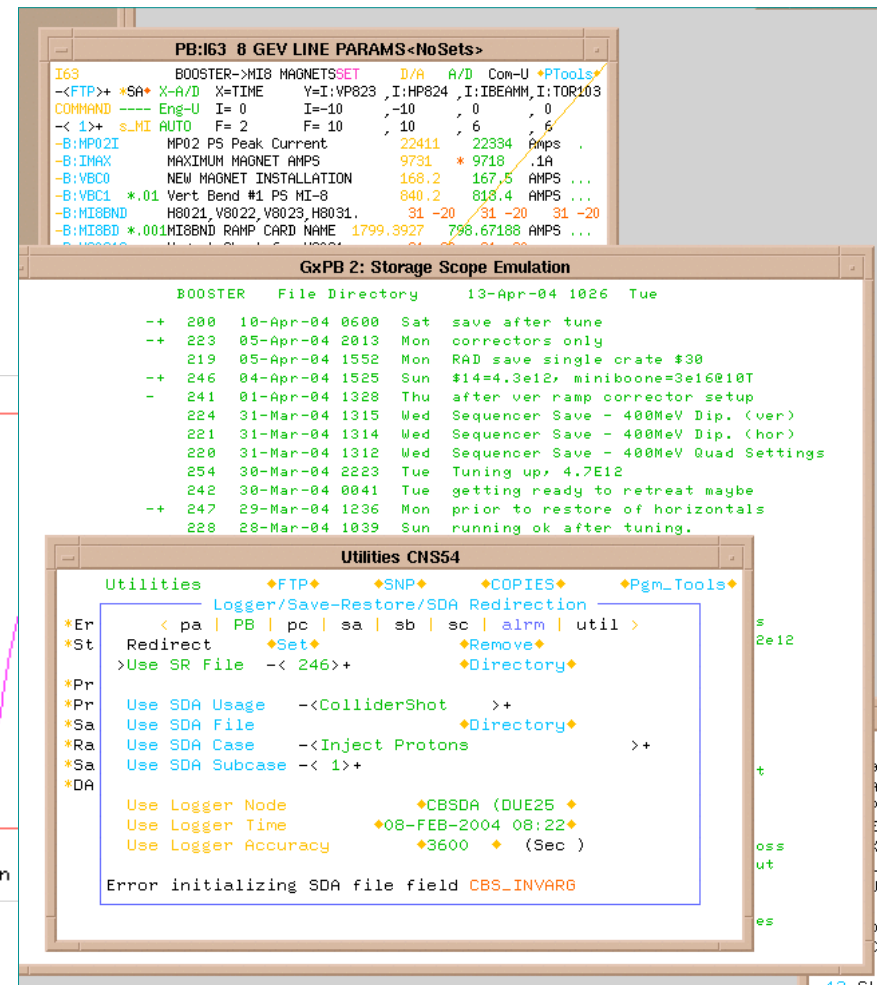
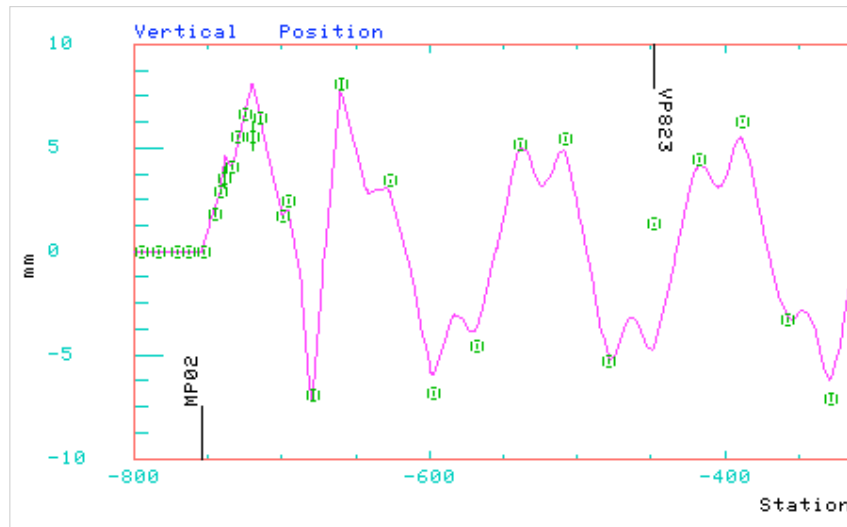
March 31, 2005

Effects of known sources of orbit error

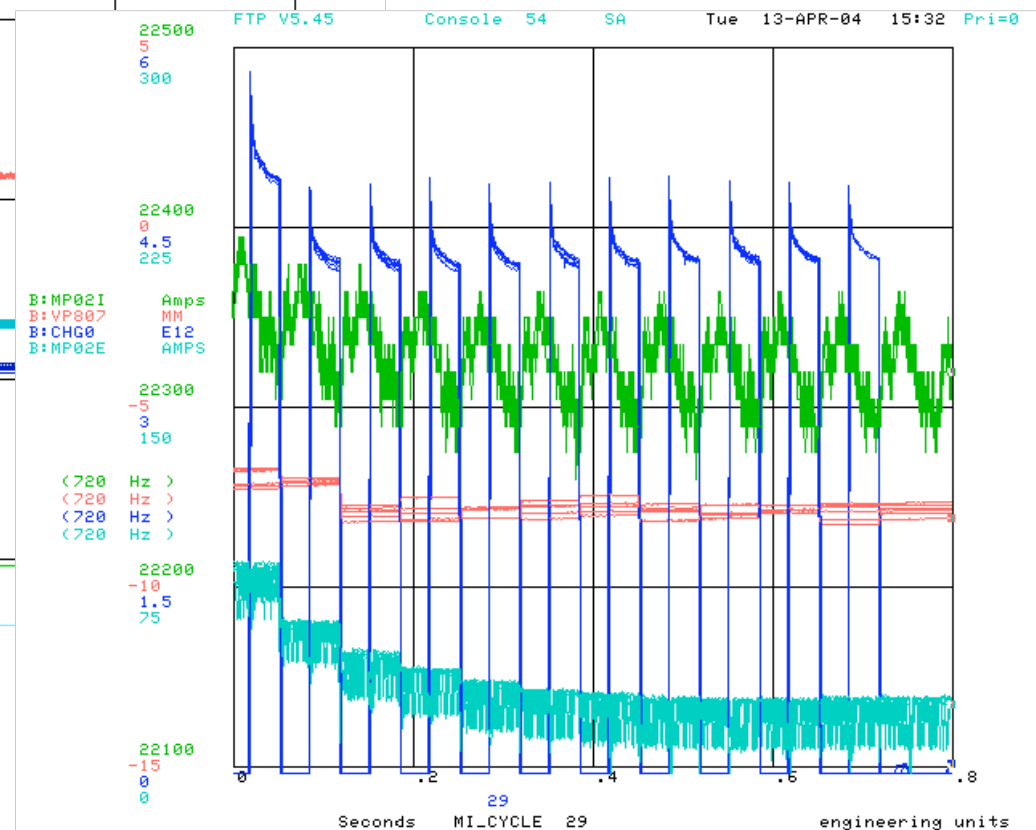
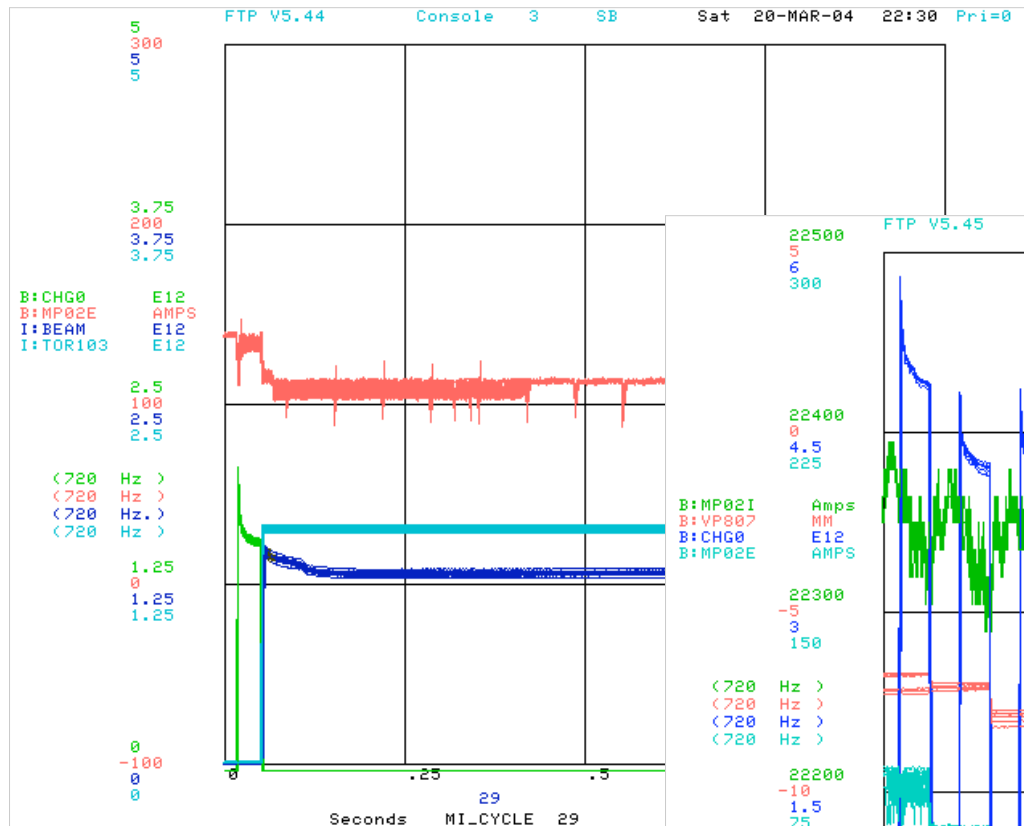


Stability with septum magnet MPØ2

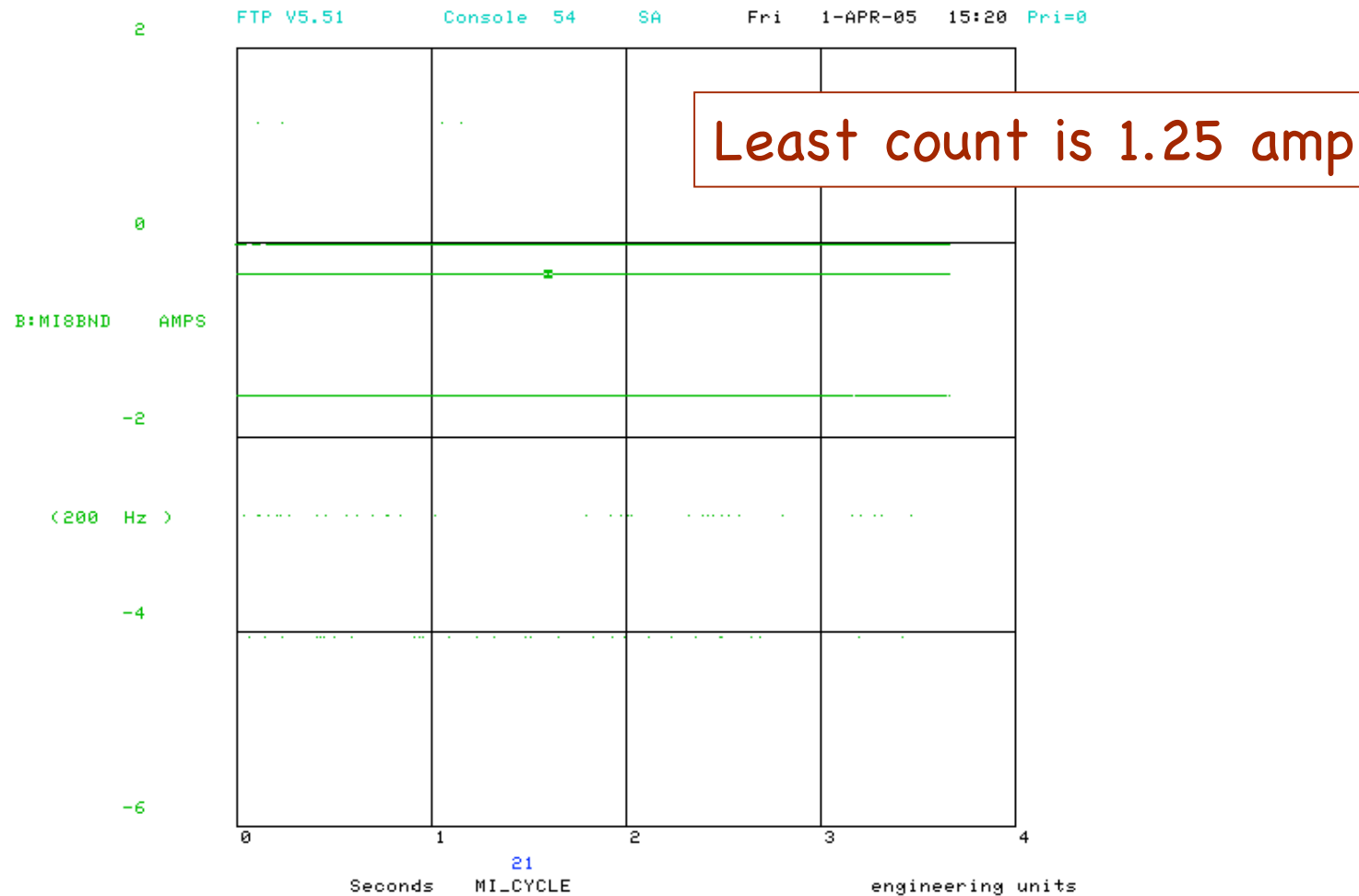
- MPØ2 setting not changed
- Orbit difference:
4/12/04 - 4/06/04
- Calculation:
+90 amps on MPØ2



MPØ2 error signal



MI8BEND read-back resolution



Summary

- Vertical position variation
 - Consistent with MPØ2 not steady.
- Horizontal palne
 - MI8 bend
 - ✓ Read-back precision is too coarse.
 - Cycle to cycle momentum variation